AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the Application.

Claim 1. (Previously presented) A communication network operating to support voice and data communication within a premises, said communication network comprising:

a plurality of mobile network devices comprising a buffer that stores incoming digital voice information for a predetermined queuing period before beginning voice reproduction from the stored digital voice information;

a stationary network device;

a wireless network that is used by each of said plurality of mobile network devices to selectively exchange voice and data packets with others of the plurality of mobile network devices;

a hardwired network connected to both said stationary network device and said wireless network;

said hardwired network being used to route voice and data packets between said stationary network device and said plurality of mobile network devices which participate via said wireless network;

a telephone, connected to said stationary network device, that captures, delivers, receives and reproduces voice in an analog voice stream form;

said stationary network device comprising a buffer that stores digital voice information received from said wireless network for a predetermined queuing period before converting the stored digital voice information into an analog voice stream and delivering the analog voice stream to said telephone; and

said stationary network device converts analog voice streams received from said telephone into voice packets for delivery via said hardwired and wireless networks to a selected one of said plurality of mobile network devices.

Claim 2. (Cancelled) .

Claim 3. (Previously presented) The communication network of claim 1 wherein said stationary network device is a computer.

Claim 4. (Previously presented) The communication network of claim 1 wherein said wireless network utilizes a polling protocol and spanning tree routing.

Claim 5. (Previously presented) The communication network of claim 1 wherein said stationary network device provides call setup assistance for said telephone.

Claim 6. (Previously presented) The communication network of claim 1 further comprising:

a telephone switching network connected to said stationary network device; and

said stationary network device selectively routes analog voice streams received from said telephone onto said telephone switching network, and said stationary network device selectively routes analog voice streams received from said telephone switching network to said telephone.

Claim 7. (Previously presented) A communication network located within a premises for supporting voice and data exchanges, said communication network comprising:

a plurality of portable terminals, each comprising a wireless transceiver;

each of said plurality of portable terminals capture voice in an analog voice stream form and generate therefrom digital voice packets, and each of said plurality of portable terminals receive digital voice packets, generate therefrom analog voice streams, and reproduce voice from the analog voice streams;

each of said plurality of portable terminals capture data and generate therefrom data packets, and each of said plurality of portable terminals receive data packets and reproduce data from the data packets received;

a plurality of access devices, each comprising a wireless transceiver; and

said plurality of access devices using a polling protocol to manage wireless routing of data and voice packets within the premises among said plurality of portable terminals.

Claim 8. (Previously presented) The communication network of claim 7 wherein said plurality of access devices utilize spanning tree routing for both data and voice packets.

Claim 9. (Previously presented) The communication network of claim 7 further comprising:

a telephone, connected to one of said plurality of access devices, that captures, delivers, receives and reproduces voice in an analog voice stream form;

said one of said plurality of access devices selectively converting digital voice packets received into an analog voice stream for delivery to said telephone for reproduction; and

said one of said plurality of access devices selectively converting an analog voice stream received from said telephone into digital voice packets for delivery to one of said plurality of portable terminals.

Claim 10. (Previously presented) The communication network of claim 9 further comprising:

a telephone switching network connected to said one of said plurality of access devices;

said one of said plurality of access devices selectively routes analog voice streams received from said telephone through said telephone switching network; and

said one of said plurality of access devices selectively routes analog voice streams received from said telephone switching network to said telephone.

Claim 11. (Previously presented) The communication network of claim 10 wherein said one of said plurality of access devices provides call setup assistance for said telephone.

Claim 12. (Previously presented) The communication network of claim 10 wherein said one of said access devices stores incoming digital voice packets for a queuing time period before converting the digital voice packets into an analog voice stream form.

Claim 13. (Previously presented) The communication network of claim 7 further comprising:

a telephone switching network connected to one of said plurality of access devices;

said one of said plurality of access devices selectively converts digital voice packets received into an analog voice stream form for routing through said telephone switching network; and

said one of said plurality of access devices selectively converts analog voice streams received from said telephone switching network into digital voice packets for routing to select ones of said plurality of portable terminals.

Claim 14. (Previously presented) The communication network of claim 13 wherein said one of said access devices selectively provides call setup assistance to interface with said telephone switching network.

Claim 15. (Previously presented) A communication network for supporting voice exchanges, said communication network comprising:

a voice stream network that selectively routes voice signals captured in an analog voice stream form;

a voice packet network, independent of said voice stream network, that selectively routes voice in a digital voice packet form;

a first network device that captures and delivers voice in the analog voice stream form, and said first network device receives and reproduces voice from the analog voice stream form;

a second network device, independent of said first network device, that communicatively couples with said first network device to receive and deliver voice in the analog voice stream form;

said second network device selectively interfaces with said voice stream network to receive and route voice for said first network device in the analog voice stream form;

said second network device selectively interfaces with said voice packet network to receive and route voice for said first network device in the digital voice packet form; and

said second network device converts voice between the analog voice stream form and the digital voice packet form when needed for routing voice between said first network device and said voice packet network.

Claim 16. (Previously presented) The communication network of claim 15 wherein said voice stream network comprises a telephone switching network.

Claim 17. (Previously presented) The communication network of claim 16 wherein said voice packet network uses a polling protocol and incorporates spanning tree routing.

Claim 18. (Previously presented) The communication network of claim 15 wherein said first network device is a telephone that captures, delivers, receives and reproduces voice in an analog voice stream form.

Claim 19. (Previously presented) The communication network of claim 18 wherein said second network device is a computer.

Claim 20. (Previously presented) The communication network of claim 19 wherein said voice packet network comprises an Internet switching network.

Claim 21. (Previously presented) The communication network of claim 15 wherein said second network device is an access device.

Claim 22. (Previously presented) At least one circuit for use in a mobile communication device for use in a communication network, the communication network operating to support voice and data communication and having at least a stationary network device communicatively coupled to a telephone, a wireless network operable to exchange voice and data packets with a plurality of mobile communication devices, and a hardwired network communicatively coupled to the stationary network device and the wireless network and operable to route voice and data packets between the stationary network device and the plurality of mobile communication devices via at least the wireless network, the at least one circuit operational to, at least:

selectively exchange voice and data packets with other mobile communication devices via at least the wireless network;

transmit digital voice information to the stationary network device through at least the wireless and hardwired networks, the transmitted digital voice information for buffering by the stationary network device for a predetermined queuing period before conversion to an analog voice stream and deliverance to the telephone;

receive digital voice information from the stationary network device through at least the hardwired and wireless networks, the received digital voice information converted by the stationary network device from an analog voice stream received from the telephone into voice packets for delivery to the mobile communication device; and

store the received digital voice information in a buffer for a predetermined queuing period before beginning voice reproduction from the stored received digital voice information.

Claim 23. (Cancelled).

Claim 24. (Previously presented) The at least one circuit of claim 22, where the stationary network device is a computer.

Claim 25. (Previously presented) The at least one circuit of claim 22, where the wireless network utilizes a polling protocol and spanning tree routing.

Claim 26. (Previously presented) The at least one circuit of claim 22, where the stationary network device provides call setup assistance for the telephone.

Claim 27. (Previously presented) The at least one circuit of claim 22, where the communication network further has at least a telephone switching network communicatively coupled to the stationary network device, the stationary network device selectively routes analog voice streams received from the telephone onto the telephone switching network, and the stationary network device selectively routes analog voice streams received from the telephone switching network to the telephone.

Claim 28. (Previously presented) At least one circuit for use in a mobile communication device for use in a communication network, the communication network operating to support voice and data communication and having at least a plurality of access devices, where each access device has a wireless transceiver, and the plurality of access devices use a polling protocol to manage wireless routing of data and voice packets among a plurality of mobile communication devices, the at least one circuit operational to, at least:

capture voice in an analog voice stream form and generate digital voice packets from the captured voice;

receive digital voice packets, generate analog voice streams from the received digital voice packets, and reproduce voice from the generated analog voice streams;

capture data and generate data packets from the captured data; and

receive data packets and reproduce data from the received data packets.

Claim 29. (Previously presented) The at least one circuit of claim 28, where the plurality of access devices utilize spanning tree routing for both data and voice packets.

Claim 30. (Previously presented) The at least one circuit of claim 28, the communication network further having, at least, a telephone, connected to one of the plurality of access devices, that captures, delivers, receives and reproduces voice in an analog voice stream form, where the one of the plurality of access devices selectively converts digital voice packets received into an analog voice stream for delivery to the telephone for reproduction, and the one of the plurality of access devices selectively converts an analog voice stream received from the telephone into digital voice packets for delivery to one of the plurality of mobile communication devices.

Claim 31. (Previously presented) The at least one circuit of claim 30, the communication network further having, at least, a telephone switching network connected to the one of the plurality of access devices, where the one of the plurality of access devices selectively routes an analog voice stream received from the telephone through the telephone switching network, and the one of the plurality of access devices selectively routes an analog voice stream received from the telephone switching network to the telephone.

Claim 32. (Previously presented) The at least one circuit of claim 31, where the one of the access devices provides call setup assistance for the telephone.

Claim 33. (Previously presented) The at least one circuit of claim 31, where the one of the access devices stores incoming digital voice packets for a queuing time period before converting the digital voice packets into an analog voice stream form.

Claim 34. (Previously presented) The at least one circuit of claim 28, the communication network further having, at least, a telephone switching network connected to one of the plurality of access devices, where the one of the plurality of

access devices selectively converts digital voice packets received into an analog voice stream form for routing through the telephone switching network, and the one of the plurality of access devices selectively converts an analog voice stream received from the telephone switching network into digital voice packets for routing to select ones of the plurality of mobile communication devices.

Claim 35. (Previously presented) The at least one circuit of claim 34, where the one of the plurality of access devices selectively provides call setup assistance to interface with the telephone switching network.

Claim 36. (Previously presented) At least one circuit for use in a communication device for use in a communication network, the communication network supporting voice exchanges and having at least a voice stream network that selectively routes voice signals captured in an analog voice stream form, and a voice packet network independent of the voice stream network that selectively routes voice in a digital voice packet form, the at least one circuit operational to, at least:

communicatively couple with a first network device to receive and deliver voice in the analog voice stream form, the first network device operational to capture and deliver voice in the analog voice stream form and receive and reproduce voice from the analog voice stream form;

selectively interface with the voice stream network to receive and route voice for the first network device in the analog voice stream form;

selectively interface with the voice packet network to receive and route voice for the first network device in the digital voice packet form; and

convert voice between the analog voice stream form and the digital voice packet form when needed for routing voice between the first network device and the voice packet network.

Claim 37. (Previously presented) The at least one circuit of claim 36, where the voice stream network has at least a telephone switching network.

Claim 38. (Previously presented) The at least one circuit of claim 37, where the voice packet network uses a polling protocol and incorporates spanning tree routing.

Claim 39. (Previously presented) The at least one circuit of claim 36, where the first network device is a telephone that captures, delivers, receives and reproduces voice in an analog voice stream form.

Claim 40. (Previously presented) The at least one circuit of claim 36, where the communication device is a computer.

Claim 41. (Previously presented) The at least one circuit of claim 40, where the first network device is a telephone that captures, delivers, receives and reproduces voice in an analog voice stream form, and the voice packet network includes an Internet switching network.

Claim 42. (Previously presented) The at least one circuit of claim 36, where the communication device is an access device.

Claim 43. (New) A communication network operating to support voice and data communication within a premises, said communication network comprising:

a plurality of mobile network devices comprising a buffer that stores incoming digital voice information for a predetermined queuing period before beginning voice reproduction from the stored digital voice information;

a stationary network device;

a wireless network that is used by each of said plurality of mobile network devices to selectively exchange voice and data packets with others of the plurality of mobile network devices;

a hardwired network connected to both said stationary network device and said wireless network;

said hardwired network being used to route voice and data packets between said stationary network device and said plurality of mobile network devices which participate via said wireless network;

a telephone, connected to said stationary network device, that captures, delivers, receives and reproduces voice in an analog voice stream form;

said stationary network device comprising a buffer that stores digital voice information received from said wireless network for a predetermined queuing period before converting the stored digital voice information into an analog voice stream and delivering the analog voice stream to said telephone, wherein the predetermined queuing period is determined through examining delays found in test signal routing; and

said stationary network device converts analog voice streams received from said telephone into voice packets for delivery via said hardwired and wireless networks to a selected one of said plurality of mobile network devices.

Claim 44. (New) The communication network of claim 43 wherein said stationary network device is a computer.

Claim 45. (New) The communication network of claim 43 wherein said wireless network utilizes a polling protocol and spanning tree routing.

Claim 46. (New) The communication network of claim 43 wherein said stationary network device provides call setup assistance for said telephone.

Claim 47. (New) The communication network of claim 43 further comprising:

a telephone switching network connected to said stationary network device; and

said stationary network device selectively routes analog voice streams received from said telephone onto said telephone switching network, and said stationary network device selectively routes analog voice streams received from said telephone switching network to said telephone.

Claim 48. (New) At least one circuit for use in a mobile communication device for use in a communication network, the communication network operating to support voice and data communication and having at least a stationary network device communicatively coupled to a telephone, a wireless network operable to exchange voice and data packets with a plurality of mobile communication devices, and a hardwired network communicatively coupled to the stationary network device and the wireless network and operable to route voice and data packets between the stationary network device and the plurality of mobile communication devices via at least the wireless network, the at least one circuit operational to, at least:

selectively exchange voice and data packets with other mobile communication devices via at least the wireless network;

transmit digital voice information to the stationary network device through at least the wireless and hardwired networks, the transmitted digital voice information for buffering by the stationary network device for a predetermined queuing period before conversion to an analog voice stream and deliverance to the telephone, where the predetermined queuing period is determined through examining delays found in test signal routing;

receive digital voice information from the stationary network device through at least the hardwired and wireless networks, the received digital voice information converted by the stationary network device from an analog voice stream received from the telephone into voice packets for delivery to the mobile communication device; and

store the received digital voice information in a buffer for a predetermined queuing period before beginning voice reproduction from the stored received digital voice information.

Claim 49. (New) The at least one circuit of claim 48, where the stationary network device is a computer.

Claim 50. (New) The at least one circuit of claim 48, where the wireless network utilizes a polling protocol and spanning tree routing.

Claim 51. (New) The at least one circuit of claim 48, where the stationary network device provides call setup assistance for the telephone.

Claim 52. (New) The at least one circuit of claim 48, where the communication network further has at least a telephone switching network communicatively coupled to the stationary network device, the stationary network device selectively routes analog voice streams received from the telephone onto the telephone switching network, and the stationary network device selectively routes analog voice streams received from the telephone switching network to the telephone.

Claim 53. (New) At least one circuit for use in a mobile communication device for use in a communication network, the communication network operating to support voice and data communication and having at least a plurality of access devices, where each access device has a wireless transceiver, and the plurality of access devices use a polling protocol to manage wireless routing of data and voice packets among a plurality of mobile communication devices, the at least one circuit operational to, at least:

receive digital voice information converted from analog voice stream form and generate digital voice packets from the received digital voice information;

receive digital voice packets, generate digital voice information from the received digital voice packets, and transmit the generated digital voice information for conversion to analog voice stream form for reproduction of voice;

capture data and generate data packets from the captured data; and

receive data packets and reproduce data from the received data packets.

Claim 54. (New) The at least one circuit of claim 53 wherein routing of both data and voice packets to the mobile communication device utilizes spanning tree routing.

Claim 55. (New) The at least one circuit of claim 53 wherein digital voice packets sent by the mobile communication device are selectively converted by one of the plurality of access devices in the communication network to analog voice stream form for delivery to a telephone that captures, delivers, receives and reproduces voice, and wherein the mobile communication device receives digital voice packets from the one of the plurality of access devices that selectively converts an analog voice stream received from the telephone to form the digital voice packets received by the mobile communication device.

Claim 56. (New) The at least one circuit of claim 55, where the one of the plurality of access devices stores incoming digital voice packets for an adjustable queuing time period before converting the digital voice packets into analog voice stream form.

Claim 57. (New) The at least one circuit of claim 53, wherein digital voice packets sent by the mobile communication device are selectively routed to a telephone switching network connected to the one of the plurality of access devices that converts the digital voice packets received from the mobile communication device into an analog voice stream form, and wherein the one of the plurality of access devices selectively converts an analog voice stream received from the telephone switching network into digital voice packets for routing to the mobile communication device.

Claim 58. (New) The at least one circuit of claim 53 wherein the at least one circuit causes buffering of digital voice information for an adjustable queuing time period before transmitting the digital voice information for conversion to analog voice stream form.

Claim 59. (New) The at least one circuit of claim 53 wherein the at least one circuit directs one of the at least one access device to route digital voice packets via a user-selected communication network.